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Search Report
EIC 3600

STIC Database Tracking Number: 375361

To: Heidi Riviere **Location: KNX-5C85** **Art Unit: 3689** **Date: 10/04/2011** **Case Serial Number: 10/672,212**	**From: Paul Henriques** **Location: EIC3600** **KNX 4B59** **Phone: (571) 272-5167** **paul.henriques@uspto.gov**

Search Notes

Dear Examiner Riviere:

Please find attached the results of your search for the above-referenced case. The search was conducted in Dialog, Proquest, EBSCOhost and Google.

I have listed *potential* references of interest in the first part of the search results. However, please be sure to scan through the entire report. There may be additional references that you might find useful.

If you have any questions about the search, or need a refocus, please do not hesitate to contact me.

Thank you for using the EIC, and we look forward to your next search!

I. Potential References of Interest

A. Dialog

12/5/3 (Item 3 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0012652602 *Drawing available*
WPI Acc no: 2002-502144/200254
XRPX Acc No: N2002-397499
Wireless liquid level sensing system e.g. for petrol, diesel, has signal processing and communication unit connected to pressure sensor, that transmits sensed liquid level information to remote server
Patent Assignee: SENSILE TECHNOLOGIES SA (SENS-N)
Inventor: ROMANOWICZ R

Patent Family (1 patents, 26 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
EP 1215471	A1	20020619	EP 2000127733	A	20001218	200254	B

Priority Applications (no., kind, date): EP 2000127733 A 20001218

Alerting Abstract EP A1
NOVELTY - A pressure sensor (20) immersed at bottom wall (28) of a **liquid** tank (6), **senses liquid** level. A signal processing and communication unit (24) connected to the **sensor** through a cable (22), **transmits** sensed **liquid information** to a **remote sensor**.
USE - For homes, apartments, and commercial buildings for **sensing** level of **liquids** such as petrol, diesel, water in a tank and transmitting to a remote server through a wireless communication network.
ADVANTAGE - Enables effective fluid level measurement without on-site inspection. Reduces installation cost and improves reliability, since the sensing system comprises wireless communication network which eliminates need to draw wires to location of the tank.
DESCRIPTION OF DRAWINGS - The figure shows an exploded view of the fluid level sensing system.
6 Liquid tank
20 Pressure sensor
22 Cable
24 Signal processing and communication unit
28 Bottom wall of liquid tank

Title Terms /Index Terms/Additional Words: WIRELESS; LIQUID; LEVEL; SENSE; SYSTEM; GASOLINE; DIESEL; SIGNAL; PROCESS; COMMUNICATE; UNIT; CONNECT; PRESSURE; TRANSMIT; INFORMATION; REMOTE; SERVE

ECLA: G01F-023/00B, G01F-023/14

File Segment: EPI;
DWPI Class: S02; W05
Manual Codes (EPI/S-X): S02-C06B; S02-K08A; W05-D06A; W05-D07G; W05-D08E

16/5/6 (Item 5 from file: 2)
DIALOG(R)File 2: INSPEC

05677730
Title: Design of a smart, survivable sensor system for enhancing the safe and secure transportation of hazardous or high-value cargo on railroads
Author(s): Hogan, J.R.[1]; Rey, D.[1]; Faas, S.E.[1]
Affiliation(s):
[1] Sandia Nat. Labs., Albuquerque, NM, USA
Book Title: Proceedings of the 1994 ASME/IEEE Joint Railroad Conference in Conjunction with Area 1994 Annual Technical Conference (Cat. No.94CH3432-2)
Inclusive Page Numbers: 147-52
Publisher: IEEE, New York, NY
Country of Publication: USA
Publication Date: 1994
Conference Title: Proceedings of IEEE/ASME Joint Railroad Conference
Conference Date: 22-24 March 1994
Conference Location: Chicago, IL, USA
Conference Sponsor: ASME IEEE
Editor(s): Hawthorne, K.L. Hill, R.J.
ISBN: 0-7803-1890-0
U.S. Copyright Clearance Center Code: 0 7803 1890 0/94/$4.00
Item Identifier (DOI): 10.1109/RRCON.1994.289011
Number of Pages: vi+157
Language: English
Document Type: Conference Paper (PA)
Treatment: Practical (P)
Abstract: An application of smart sensor technology developed by Sandia National Laboratories for use in the safe and secure transportation of high value or hazardous materials is proposed for a railroad application. The Green Box would be capable of surviving most typical railroad accidents. In an accident, the system would **send** a distress signal notifying **authorities** of the location and condition of the cargo; permitting them to respond in the most effective manner. The concept proposes a strap-on sensor package. the Green Box, that could be attached to any railroad car or cargo container. Its primary purpose is to minimize the number, severity and consequences of accidents and to reduce losses due to theft. The system would also be capable of recognizing component failure conditions, notifying the operators and logging sensor data for use in directing preventative maintenance. The modular implementation, which facilitates system integration in a number of applications including the Advanced Train Control System (ACTS), is discussed. The methodology for determining the environmental specification for accident survivability is presented. A test plan for evaluating hardware performance in both normal operating and accident conditions is described. (*11 refs.*)

Subfile(s): B (Electrical & Electronic Engineering); E (Mechanical & Production Engineering)
Descriptors: **cellular** radio; intelligent **sensors**; maintenance engineering; railways; safety
Identifiers: smart **sensor**; survivable **sensor**; high-value cargo; **hazardous** cargo; railroads; Sandia National Laboratories; Green Box; distress signal; strap-on sensor package; component failure conditions; data logging; preventative maintenance; Advanced Train Control System; accident conditions; cellular radio
Classification Codes: B7230 (Sensing devices and transducers); B6250F (Mobile radio systems) ; B0160 (Plant engineering, maintenance and safety); E0240H (Health and safety aspects); E1020 (Maintenance and reliability); E3650E (Railway industry)
International Patent Classification:
B61 (Railways)
E01B (Permanent way; Permanent-way tools; Machines for making railways of all kinds)
H04B-0007/00 (Radio transmission systems, i.e. using radiation field)
H04W (Wireless communication networks)
INSPEC Update Issue: 1994-019

10/3,K/3 (Item 1 from file: 275)
DIALOG(R)File 275: Gale Group Computer DB(TM)

03039982 **Supplier Number:** 90129079 **(Use Format 7 Or 9 For** FULL TEXT)
RFID: From Just-In-Time to Real Time.(Radio Frequency Identification)

CioInsight , NA
April 12 , 2002
ISSN: 1535-0096
Language: English **Record Type:** Fulltext
Word Count: 3414 **Line Count:** 00260
...cook turkeys based on instructions from chips in the packaging. Alien Technology recently won a $120 million contract from the Department of Defense to combine **RFID** tags with other types of **sensors** to pick up vibrations or **detect** the presence of **chemicals** or **biological** agents. The U.S. military wants to **drop** so-called "smart dust" **sensors** on a battlefield, and by picking up vibrations and knowing the exact location of a specific tag, generals could know how many enemies are hiding...

B. Additional Resources Searched

Financial Times FullText (via ProQuest): No relevant results.

Internet & Personal Computing Abstracts (via EBSCOhost): No relevant results.

II. Inventor Search Results from Dialog

16/5/1 (Item 1 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0018282319 *Drawing available*
WPI Acc no: 2008-M02655/200870
XRPX Acc No: N2008-885718
Sensor optimum position determination method involves retrieving data from simulation cache to evaluate selected candidate sensor solution comprising sensors at corresponding candidate location with performance criteria
Patent Assignee: ITT MFG ENTERPRISES INC (INTT)
Inventor: CROCOLL W; HENNING M D; SEDEHI J; **SMITH M J**; HENNING M; **SMITH M**

Patent Family (7 patents, 122 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 2008124203	A1	20081016	WO 2008US52623	A	20080131	200870	B
AU 2008236604	A1	20081016	AU 2008236604	A	20080131	200965	E
EP 2126560	A1	20091202	EP 2008780395	A	20080131	200979	E
			WO 2008US52623	A	20080131		
CA 2679716	A1	20081016	CA 2679716	A	20080131	201001	E
			WO 2008US52623	A	20080131		
			CA 2679716	A	20090825		
US 20100268519	A1	20101021	US 2007686170	A	20070314	201069	E
JP 2010536072	W	20101125	WO 2008US52623	A	20080131	201077	E
			JP 2009553661	A	20080131		
AU 2008236604	B2	20110901	AU 2008236604	A	20080131	201161	E

Priority Applications (no., kind, date): US 2007686170 A 20070314

Alerting Abstract WO A1
NOVELTY - The method involves storing data representing interaction of hazard with sensors at each candidate locations in specific region, in simulation cache. The data are retrieved from cache for evaluating selected candidate sensor solution comprising different type of sensors at corresponding candidate location with performance criteria.
DESCRIPTION - An INDEPENDENT CLAIM is included for computer readable medium storing instructions for determining optimum position of sensors.
USE - Method for determining optimum position for **sensors** in region of **chemical**, **biological** and radiological hazards.
ADVANTAGE - The time required for generating optimum sensor layout can be reduced.
DESCRIPTION OF DRAWINGS - The drawing shows a block diagram of the computing system.

600 Computing system
610 Computing resource
620 Memory
624 Simulation software
626 Interaction software

Title Terms /Index Terms/Additional Words: SENSE; OPTIMUM; POSITION; DETERMINE; METHOD; RETRIEVAL; DATA; SIMULATE; CACHE; EVALUATE; SELECT; CANDIDATE; SOLUTION; COMPRISE; CORRESPOND; LOCATE; PERFORMANCE; CRITERIA

ECLA: G01N-033/00D
US Classification, Current Main: 703-006000
US Classification, Issued: 7036

File Segment: EPI;
DWPI Class: S03; T01
Manual Codes (EPI/S-X): S03-E09; T01-H03A; T01-J20C; T01-S03

16/5/2 (Item 2 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0015219984
WPI Acc no: 2005-570022/200558
Related WPI Acc No: 2004-524699
XRAM Acc no: C2005-172574
XRPX Acc No: N2005-467415
Substance identifying and reporting system for, e.g. solid, liquid, or gas, comprises remote sensing units including position-determining location determination mechanism, data collection mechanism, and first transmitter, and control unit
Patent Assignee: HONEYWELL FEDERAL MFG & TECHNOLOGIES LLC (HONE)
Inventor: **COOK C J**; **LUSBY M**; **SMITH M**; **SOLYOM D**; **VAN HOOK A**; **WENSKI E G**

Patent Family (2 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20050171701	A1	20050804	US 2003672210	A	20030926	200558	B
US 7126104	B2	20061024	US 2002414507	P	20020926	200670	E
			US 2003672210	A	20030926		

Priority Applications (no., kind, date): US 2002414507 P 20020926; US 2003672210 A 20030926

Alerting Abstract US A1
NOVELTY - **Substance identifying** and reporting system comprising **remote sensing units** including position-determining location determination mechanism to determine an actual geographic location of the **remote sensing unit**, data collection mechanism for collecting data for **identifying** the **substance**,

and first transmitter to transmit actual geographic location and data; and control unit including receiver, database, and second transmitter, is new.
DESCRIPTION - **Substance identifying** and reporting system comprises **remote sensing units** including position-determining location determination mechanism to determine an actual geographic location of the **remote sensing unit**, data collection mechanism for collecting data for **identifying** the **substance**, and first transmitter to transmit actual geographic location and data collected by the data collection mechanism; and control unit including receiver to receive the actual geographic location and the data transmitted by the **remote sensing unit**, database that associates geographic locations with respective local reporting authorities and respective local reporting policies, such that the actual geographic location of the **remote sensing unit** can be used to identify local reporting authority and local reporting policy, and second transmitter adapted to transmit the actual geographic location and the data, and to notify the local reporting authorities in accordance with local reporting policies.
USE - For **identifying** and reporting presence of **substance**, e.g. solid, liquid, gas, or threatening chemical, biological, or radioactive substance.
ADVANTAGE - The system provides an automated and **remotely** controllable **remote sensing unit** that both allows for faster deployment and eliminates exposure risks to human operators. Image recording and analysis methods (IRAM) units can be temporarily deployed into an area to provide the quickest warning of the presence of threatening substance. They can be permanently deployed, e.g. in a single layer or concentric layers around a city to provide continuous monitoring and advance warning of a terrorist attack using weapons of mass destruction or other threatening substances.

Title Terms /Index Terms/Additional Words: SUBSTANCE; IDENTIFY; REPORT; SYSTEM; SOLID; LIQUID; GAS; COMPRISE; REMOTE; SENSE; UNIT; POSITION; DETERMINE; LOCATE; MECHANISM; DATA; COLLECT; FIRST; TRANSMIT; CONTROL

ECLA: G01N-033/50
US Classification, Current Main: 702-019000
US Classification, Issued: 70219, 250221, 250559.4
File Segment: CPI; EPI
DWPI Class: B04; J04; K07; S02; S03; T01; W02; W07
Manual Codes (EPI/S-X): S02-K08A; S03-E14L; S03-E14P; T01-J13; W02-C03C3F; W07-F01
Manual Codes (CPI/A-N): B11-C08; B11-C11; B12-K04; J04-B01; K07-A01A

16/5/3 (Item 3 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0014336744 *Drawing available*
WPI Acc no: 2004-524699/200450
Related WPI Acc No: 2005-570022
Remote sensing unit, for identifying, reporting and evaluating presence of substance e.g. hazardous chemical, biological or radioactive substance, comprises position-determining mechanism, imaging device, and transmitter
Patent Assignee: HONEYWELL FEDERAL MFG & TECHNOLOGIES LLC (HONE)

Inventor: **COOK C J**; HOOK A V; **LUSBY M**; **SMITH M**; **SOLYOM D**; **VAN HOOK A**; **WENSKI E G**

Patent Family (2 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20040120857	A1	20040624	US 2002414507	P	20020926	200450	B
			US 2003672211	A	20030926		
US 6946671	B2	20050920	US 2003672211	A	20030926	200562	E

Priority Applications (no., kind, date): US 2002414507 P 20020926; US 2003672211 A 20030926; US 2003672211 A 20030926

Alerting Abstract US A1

NOVELTY - The **remote sensing unit** (12), for collecting data for **identifying** a **substance**, comprises:

A. a position-determining mechanism to determine a geographic location of the **remote sensing unit**;
B. imaging **device** to generate a magnified image of the substance; and
C. first transmitter to transmit the geographic location and the magnified image.

DESCRIPTION - An INDEPENDENT CLAIM is also included for a system (10) for **identifying** a substance comprising a **remote sensing unit**, and a control unit (14). The control unit includes a receiver to receive the geographic location and the image transmitted by the **remote sensing unit**, an image analysis and recognition component to automatically compare the image to reference images associated with known **substances**, and thus attempt to **identify** the **substance** based upon similarities between the image and the reference images, and second transmitters to transmit a report including the geographic location of the **remote sensing unit**, the image, and the **identification** of the **substance** by the image analysis and recognition component.

USE - The device is used for identifying, reporting and evaluating a presence of solid, liquid gas or other substance (claimed), particularly a dangerous, hazardous or threatening chemical, biological or radioactive substance.

ADVANTAGE - The unit allows faster deployment and eliminates exposure risks to human operators. It can be temporarily deployed in any manner (e.g. airdrop, balloon, robot) into an area to provide the quickest warning of the presence of threatening substance. It can also be permanently deployed in a single layer or concentric layers around a city to provide continuous monitoring and advance warning of terrorist attack. It reduces maintenance time, and makes the system more resistant to obsolescence.

DESCRIPTION OF DRAWINGS - The figure shows a system for identifying, reporting and evaluating a presence of dangerous, hazardous or threatening solid, liquid, gas or other substance.

10 Identifying system
12 **Remote sensing unit**
14 Control unit
18 Storage servers
84 Evaluative software

Title Terms /Index Terms/Additional Words: REMOTE; SENSE; UNIT; IDENTIFY; REPORT;

EVALUATE; PRESENCE; SUBSTANCE; HAZARD; CHEMICAL; BIOLOGICAL; RADIOACTIVE; COMPRISE; POSITION; DETERMINE; MECHANISM; IMAGE; DEVICE; TRANSMIT

ICO: T04L-029:08N11
US Classification, Current Main: 250-559400, 422-082050; Secondary: 250-208100, 342-357520, 422-067000 , 436-025000
US Classification, Issued: 43625, 42267, 42282.05, 250208.1, 250559.4
File Segment: CPI; EPI
DWPI Class: B04; J04; K02; K07; S02; S03; T01; W05
Manual Codes (EPI/S-X): S02-B08C; S02-K08A; S03-D05; S03-D06; S03-D09; S03-E14L; S03-E14N; S03-E15; T01-J10B2; T01-N01D; W05-B09
Manual Codes (CPI/A-N): B11-C08; B11-C08C; B11-C09; B12-K04E; J04-B01; K02-A; K07-A

III. Text Search Results from Dialog

A. Patent Files, Abstract

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File 347:JAPIO Dec 1976-2011/JUNE(Updated 110926)
         (c) 2011 JPO & JAPIO
File 350:Derwent WPIX 1963-2011/UD=201162
         (c) 2011 Thomson Reuters

Set     Items   Description
S1     484690   (DETECT??? OR SENSE? ? OR SENSING OR DETERMIN? OR ANALY?E? ? OR
 SPECTROGRAPH? OR MASS()SPECTROMETRY OR RECOGNIZ? OR IDENTIF? OR PERCEIV? OR
SENSOR? ? OR MEASUR? OR ASSESS?) (5N) (SUBSTANCE? ? OR CHEMICAL? ? OR PRODUCT? ? OR
SOLID? ? OR LIQUID? ? OR GAS? ? OR HAZARDOUS OR BIOLOGICAL OR RADIOACTIVE OR
MEDICINE? ? OR NARCOTIC? ?)

S2     127581   (REMOTE?? OR (ANOTHER OR DIFFERENT)(2N)(LOCATION? ? OR PLACE? ? OR
ROOM? ? OR BUILDING? ?) OR DISTAN?? OR FAR()AWAY OR OFFSITE OR SEPARAT??? OR APART
OR CELLULAR OR CELL()PHONE? ? OR SATELLITE? ? OR PORTABLE OR MOBILE? ? OR WAN OR
TRANSPORTABLE OR WIDE()AREA()NETWORK OR RADIO()FREQUENCY OR WIDEBAND OR
TRANSMITTER? ? OR BLUETOOTH OR WIFI OR RF OR UNTETHERED OR WIRELESS OR RFID) (7N)
(SENSOR? ? OR SENSER? ? OR (SCANNING OR READING OR SENSING)(2N)(DEVICE? ? OR APPTS
OR APPARATUS OR MACHINE? ? OR UNIT? ?))

S3       7514   (AIR()DROP??? OR AIRDROP??? OR PARACHUT? OR PLUMMET? ? OR DESCEND?
? OR PLUNG??? OR DROP??? OR FREEFALL??? OR FREE()FALL???) (7N) (SENSOR? ? OR
SENSER? ? OR (SCANNING OR READING OR SENSING)(2N)(DEVICE? ? OR APPTS OR APPARATUS
OR MACHINE? ? OR UNIT? ?))

S4    1910929   (TRANSMIT? ? OR TRANSMISSION? ? OR GENERAT? OR REPORTING OR
EXCHANG??? OR RECEIV??? OR RECEIPT? ? OR DEPOSIT? ? OR SEND??? OR TRANSFER? OR SENT
OR DISPATCH???) (7N) (DATA OR INFORMATION OR REPORT? ? OR INFO OR SUMMARY OR
SUMMARIES OR FILE? ? OR ANALYSIS OR FINDING? ? OR RESULT? ?)

S5      22817   (NOTIFY OR NOTIFIES OR ALERT??? OR COMMUNICAT? TRANSMIT? ? OR
 TRANSMISSION? ? OR EXCHANG??? OR SEND??? OR TRANSFER? OR SENT OR DISPATCH??? OR
CONVEY? ? OR FORWARD? ? OR INFORM??? OR APPRIS???) (5N) (AUTHORITY OR AUTHORITIES
OR EXPERT? ? OR ANALYST? ? OR SPECIALIST? ? OR CONSULTANT? ? OR PROFESSIONAL? ? OR
EVALUATOR? ? OR RATER? ? OR SCORER? ? OR GURU? ? OR MASTER? ? OR ADVI?R? ?)

S6      25186   (HIERARCH? OR STRUCTURE? ? OR ORGANIZATION? ? OR GROUP? ? OR
WORKGROUP? ? OR WORK()GROUP? ? OR LISTING OR PRIORIT? OR LIST OR IMPORTANCE OR
ORDER OR TIER? ? OR CHAIN()COMMAND OR LEVEL? ?) (7N) (AUTHORITY OR AUTHORITIES OR
EXPERT? ? OR ANALYST? ? OR SPECIALIST? ? OR CONSULTANT? ? OR PROFESSIONAL? ? OR
EVALUATOR? ? OR RATER? ? OR SCORER? ? OR GURU? ? OR MASTER? ? OR ADVI?R? ?)

S7       4368   AU=(SMITH, M? OR SMITH M? OR SMITH(2N)(M OR MAURICE) OR LUSBY, M?
OR LUSBY M? OR LUSBY(2N)(M OR MICHAEL) OR VAN HOOK, A? OR VAN HOOK A? OR VAN
HOOK(2N)(A OR ARTHUR) OR COOK, C? OR COOK C? OR COOK(2N)(C OR CHARLES?) OR WENSKI,
E? OR WENSKI E? OR WENSKI(2N)(E OR EDWARD) OR SOLYOM, D? OR SOLYOM D? OR
SOLYOM(2N)(D OR DAVID))

S8    1990213   IC=(G06F OR G06Q)
S9      11681   S1 AND S2
S10       100   S9 AND S3
S11        21   S10 AND S4
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S12          5   S11 NOT AY>2002
S13          1   S10 AND S5
S14          0   S13 NOT AY>2002
S15        177   S7 AND S1
S16          5   S15 AND S2
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12/5/1 (Item 1 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0013376657 *Drawing available*
WPI Acc no: 2003-466283/200344
Related WPI Acc No: 2003-138181; 2003-379794
XRAM Acc no: C2003-124353
XRPX Acc No: N2003-370892
Oil bailer apparatus and system control for removal of fluids and gas from well, comprise bailer tube, bailer tube housing, and programmable logic controller
Patent Assignee: GLOBAL ENERGY RES LLC (GLOB-N)
Inventor: RICE T F

Patent Family (2 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20030034161	A1	20030220	US 2001827446	A	20010406	200344	B
			US 2001960130	A	20010921		
			US 2002265049	A	20021004		
US 6615925	B2	20030909	US 2001827446	A	20010406	200361	E
			US 2001960130	A	20010921		
			US 2002265049	A	20021004		

Priority Applications (no., kind, date): US 2001827446 A 20010406; US 2001960130 A 20010921; WO 2002US10834 A 20020405; US 2002265049 A 20021004

Alerting Abstract US A1
NOVELTY - An oil bailer apparatus and system control (10) has a bailer tube; a bailer tube housing assembly (28) having valve(s) for selectively opening the assembly when allowing the tube to travel into well assembly, closing the assembly after the tube has traveled, and for directing a captured column of oil to a temporary storage tank (22); and a programmable logic controller (100).
DESCRIPTION - The oil bailer apparatus and system control comprises a bailer tube; a bailer tube housing assembly having valve(s) for selectively opening the assembly when allowing the tube to travel into well assembly, closing the assembly after the tube has traveled, and for directing a captured column of oil to a temporary storage tank; and a programmable logic controller for monitoring, operating, and controlling the apparatus and for translating readable information to obtain and record operational parameters. The bailer tube is sized and shaped to allow its up and down travel inside the well casing (16) and bailer tube housing assembly that is aligned with the casing. A lower end of the tube has a bailer valve for selectively capturing the column of oil inside the casing when the tube is lowered in there, and for discharging the captured column into the storage tank when the tube is raised out of the

casing. The bailer valve is in communication with the logic controller. The lower end of the tube further includes sensor(s) in communication with the logic controller for differentiating between water and oil inside the casing as the tube descends in there and for facilitating defining of a top of the water and a bottom of a well casing column of oil. The logic controller calculates a substantially optimum depth required for removal of oil without water from the casing and once correctly positioned, the bailer valve is closed capturing oil inside the tube. The tube is elevated so that the bailer valve is inside the housing assembly and above the valve(s) at which location. The valve(s) is closed after which the bailer valve is opened and the captured oil is discharged into the tank. The valve(s), driven winch mechanism (56), and sensor are each in communication with the logic controller that controls and monitors the speed of the tube inside the casing.

An INDEPENDENT CLAIM is also included for the removal of oil and gas without water from the well comprising sizing of the bailer tube to allow its up and down travel inside the housing assembly; selectively opening and closing the housing assembly during the travel of the tube; selectively capturing and discharging the column of oil during the lowering in and raising out of the tube in the casing; monitoring, operating, and controlling the apparatus and translating the information to obtain and record the operational parameters; differentiating between the water and oil inside the casing; calculating the optimum depth required for the removal of oil, capturing the oil inside the tube, elevating the tube, and discharging the oil in the tank; conducting a first sequence logging process; and performing a balanced oil production operational sequence. The logging process comprises lowering of the tube into the casing accelerating to a predetermine adjustable travel speed, allowing the tube to descend to a pre-set logging depth above the location of the top of the oil column within the casing, decreasing the speed so that the lower end of the tube enters into the column at which point the oil sensor(s) identifies the depth of the top of the column, the second end of the tube continues to **descend** until the water **sensor**(s) identifies the depth of the water in the casing, **transmits data** reflective of the identification of the two depths to the logic controller which recalculates desired operational parameters including a new logging depth, optimum depth, and tube travel speed, closes the bailer valve, starts elevating the tube through the casing until the tube enters the housing assembly, stops the tube when its lower end is above the valve(s), closes the valve(s), opens the bailer valve for a predetermined top dwell time discharging the captured oil inside the tank, closes the bailer valve after the captured oil has been discharged, and repeats the logging sequence as desired.

USE - Used for the removal of fluids and gas from well having well casing (claimed). It is used in bailing oil from oil well as well as removing natural gas.

ADVANTAGE - The system provides an improved oil bailing system which differentiates between oil and water in a given well, removes only oil, capable of operating on 5000 foot wells, and operates at a removal rate of 25-35 barrels per day.

DESCRIPTION OF DRAWINGS - The figure is a schematic partial view of the system.

10 Oil bailer apparatus and system control
16 Well casing
22 Temporary storage tank
28 Bailer tube housing assembly
34 Actuated 3-way valve
46 Condensate
48 Gas and oil separator
56 Winch mechanism
100 Programmable logic controller

Title Terms /Index Terms/Additional Words: OIL; BAIL; APPARATUS; SYSTEM; CONTROL; REMOVE; FLUID; GAS; WELL; COMPRISE; TUBE; HOUSING; PROGRAM; LOGIC

ECLA: E21B-027/00, E21B-043/12B, E21B-043/12B9, E21B-047/04B, F04B-047/02, F04B-049/06C+P
US Classification, Current Main: 166-369000; Secondary: 166-053000, 417-036000
US Classification, Issued: 166369, 16653, 41736, 166369, 16653, 41736
File Segment: CPI; EngPI; EPI
DWPI Class: H01; T06; U21; W05; X25; Q49
Manual Codes (EPI/S-X): T06-A04B1; T06-D12; U21-C01E; W05-D07X; X25-E
Manual Codes (CPI/A-N): H01-D01; H01-D02

12/5/2 (Item 2 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0013293127 *Drawing available*
WPI Acc no: 2003-379794/200336
Related WPI Acc No: 2003-138181; 2003-466283
XRAM Acc no: C2003-100855
XRPX Acc No: N2003-303278
Fluid and gas removal apparatus and system control has fluid removal mechanism, bailer tube housing assembly, bailer tube, cable wire, pulley, and programmable logic controller
Patent Assignee: GLOBAL ENERGY RES LLC (GLOB-N); RICE T F (RICE-I)
Inventor: RICE T F

Patent Family (4 patents, 28 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20020144821	A1	20021010	US 2001827446	A	20010406	200336	B
			US 2001960130	A	20010921		
WO 2002081860	A1	20021017	WO 2002US10834	A	20020405	200336	E
US 6615924	B2	20030909	US 2001827446	A	20010406	200361	E
			US 2001960130	A	20010921		
AU 2002248757	A1	20021021	AU 2002248757	A	20020405	200452	E

Priority Applications (no., kind, date): US 2001827446 A 20010406; US 2001960130 A 20010921

Alerting Abstract US A1
NOVELTY - A fluid and gas removal apparatus and system control comprises a fluid removal mechanism for removing fluids from a well casing; a bailer tube housing assembly; a bailer tube; a cable wire; a pulley; and a programmable logic controller for monitoring, operating and controlling the apparatus and for translating readable information to obtain and record operational parameters.
DESCRIPTION - A fluid and gas removal apparatus and system control comprises a fluid removal mechanism for removing fluids (oil, water and gas pockets) from a well casing and coupled directly to

an upper end of the casing; a bailer tuber housing assembly vertically aligned with the casing; a bailer tube sized to allow up and down travel of the bailer tube inside the casing and inside the housing assembly; a cable wire (68) attached to an upper end of the bailer tube; a pulley proximate an upper end of and above the housing assembly over which the cable wire is run; and a programmable logic controller (PLC) for monitoring, operating and controlling the apparatus and for translating readable information to obtain and record operational parameters. The housing assembly has an actuated 3-ported valve proximate a lower end of the housing assembly for selectively opening the housing assembly when allowing the bailer tube to travel into the casing and for closing the housing assembly after the bailer tube has traveled up into the housing assembly and for directing a captured column of oil to a temporary storage tank. An opposite end of the cable wire is attached to a driven winch for pulling the bailer tube out of the casing and for lowering the bailer tube into the casing. A lower end of the bailer tube has a bailer valve for selectively capturing the column of oil inside the casing when the bailer tube is lowered, and for discharging the captured column of oil into the storage tank when the bailer tube is raised out of the casing. The bailer valve is in electrically operative communication with the PLC. The lower end of the bailer tube further includes oil and water sensor (70) for differentiating between the water, oil and gas pockets inside the casing as the bailer tube **descends**. The oil and water **sensor** facilitates the defining of a top of the water and a bottom of a well casing column of oil. The cable wire is further electrically and operatively connected to the PLC. The PLC calculates an optimum depth required for the removal of oil without water from the casing and once correctly positioned, the bailer valve is closed thus capturing oil inside the bailer tube and the bailer tube is elevated so that the bailer valve is inside the housing assembly and above the 3-ported valve at which location, the 3-ported valve is closed after which the bailer valve is opened and the captured oil in the bailer tube is redirected into the storage tank. The 3-ported valve, the driven winch and the oil and water sensor are each in electrical and operative communication with the PLC. The PLC controls and monitors a speed of the bailer tube at each location of the bailer tube inside the casing as the bailer tube is being lowered into and elevated out of the casing.

An INDEPENDENT CLAIM is also included for removing oil and gas without water from a well, comprising providing the apparatus and system control as above; conducting a first sequence logging process during which the PLC operationally opens the bailer valve and the 3-ported valve, starts the lowering of the bailer tube into the casing accelerating to a predetermined adjustable travel speed, allows the bailer tube to descend to a pre-set logging depth above the location of the top of the oil column within the casing, decreases the adjustable travel speed so that the lower end of the bailer tube enters into the oil column at which point the oil and water sensor identifies a depth of the top of the oil column, the second end of the bailer tube continues to **descend** until the oil and water **sensor** identifies a depth of the top of the water in the casing, **transmits data** reflective of the identification of the depth of the top of the oil and water to the PLC which recalculates desired operational parameters including a new logging depth, optimum depth and bailer tube travel speed, closes the bailer tube, starts elevating the bailer tube through the casing until the bailer tube enters the housing assembly, stops the bailer tube when the lower end of the bailer tube is above the 3-ported valve, opens the bailer valve for a predetermined top dwell time thus discharging and redirecting the captured oil in the bailer tube into the temporary storage tank, closes the bailer valve after the captured oil has been discharged into the storage tank, and repeats the above operational logging sequence as desired; and performing a balance oil production operational sequence during which the PLC operationally performs as above, and repeats the above balanced oil production operational sequence until a change in depth is noted such as to require re-initiation of the logging process.

USE - Used for removing fluids and gas from a well.

ADVANTAGE - The apparatus provides an improved oil bailing system which differentiates between oil and water in a given well, removes only oil, capable of operating on 5000 ft wells and operates at the removal rate of 25-35 barrels/day. It can differentiate between water and oil and water sensor that provides feedback to the PLC to operate the mechanical system portion of the apparatus. It addresses the recovery of natural gas from the oil pumping operation.
DESCRIPTION OF DRAWINGS - The figure is a schematic view of a bailer tube assembly.
68 Cable wire
70 Oil and water sensor

Title Terms /Index Terms/Additional Words: FLUID; GAS; REMOVE; APPARATUS; SYSTEM; CONTROL; MECHANISM; BAIL; TUBE; HOUSING; ASSEMBLE; CABLE; WIRE; PULLEY; PROGRAM; LOGIC

ECLA: E21B-027/00, E21B-043/12B, E21B-043/12B9, F04B-047/02, F04B-049/06C+P
US Classification, Current Main: 166-369000; Secondary: 166-053000, 166-066000
US Classification, Issued: 166369, 16653, 16666, 166369, 16653, 41736
File Segment: CPI; EngPI; EPI
DWPI Class: H01; T01; T06; U21; Q49
Manual Codes (EPI/S-X): T01-F06; T06-A04B1; U21-C01E
Manual Codes (CPI/A-N): H01-D

12/5/4 (Item 4 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0007546439 *Drawing available*
WPI Acc no: 1996-160743/199617
XRAM Acc no: C1996-050811
XRPX Acc No: N1996-134688
Device for analysis of fluid, esp. blood, water or air - comprises receiver adapted for sample collection and contg. integrated sensor for rapid measurement
Patent Assignee: INST CHEMO & BIOSENSORIK MUENSTER EV (CHEM-N)
Inventor: DUMSCHAT C

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 5837199	A	19981117	WO 1995DE1041	A	19950804	199902	E
DE 4425725	B1	19960125	DE 4425725	A	19940805	199617	B
WO 1996004548	A1	19960215	WO 1995DE1041	A	19950804	199617	E
DE 59504733	G1	19981029	DE 59504733	A	19950804	199849	E
			WO 1995DE1041	A	19950804		
DE 4427725	C2	19961024	WO 1995DE1041	A	19950804	199647	E
JP 9506284	W	19970624	WO 1995DE1041	A	19950804	199735	E
			JP 1996506098	A	19950804		

Priority Applications (no., kind, date): DE 4427725 A 19940805

Alerting Abstract DE A1
Measuring device for the **analysis** of fluids comprises a **receiver** into which a fluid can be drawn through an opening using an intake mechanism and >= 1 sensor integrated in or attached to the receiver wall and positioned such that it can make contact with the fluid drawn into the receiver.
The sensor(s) is/are pref. conveniently attached to the outside of the receiver, with communication to the interior being via a channel through the wall. A syringe having a retractable plunger draws in the sample. The syringe contains a compartment which can be filled with a calibrating soln., with the sensor(s) arranged such that contact is made with both this soln. and the sample when the plunger is moved.
USE - The device can be used for the analysis of liquids or gases partic. blood, esp. to determine electrolytes, glucose, urea or O2, water, esp. to measure the nitrate, heavy metal, O2 or pesticide content, or air, esp. to determine the carbon monoxide, carbon dioxide or ammonia content.
ADVANTAGE - The device is simple and cost-effective, giving rapid readings which are accurate and reproducible. In partic., it enables the fluid to be taken directly from source and analysed without intermediate handling, which is of esp. significance w.r.t. blood as well as toxic and sensitive substances.

Title Terms /Index Terms/Additional Words: DEVICE; ANALYSE; FLUID; BLOOD; WATER; AIR; COMPRISE; RECEIVE; ADAPT; SAMPLE; COLLECT; CONTAIN; INTEGRATE; SENSE; RAPID ; MEASURE

ECLA: G01N-027/28
ICO: S01N-035:10F5E
US Classification, Current Main: 422-068100; Secondary: 204-403010, 204-403020, 204-416000, 422-061000 , 422-082010, 422-082020, 422-082030, 422-082040, 422-082050, 436-066000, 436-068000, 436-074000, 436-079000, 436-093000, 436-096000, 436-108000, 436-110000, 436-113000, 436-150000, 436-163000, 600-345000
US Classification, Issued: 42268.1, 128635, 204403, 204416, 42261, 42282.01, 42282.02, 42282.03, 42282.04, 42282.05, 43666, 43668, 43674, 43679, 43693, 43696, 436108, 436110, 436113, 436150, 436163
File Segment: CPI; EngPI; EPI
DWPI Class: B04; C07; D15; J04; S03; P31
Manual Codes (EPI/S-X): S03-E13B1; S03-E14H
Manual Codes (CPI/A-N): B04-B04D5; B05-C01; B05-C04; B05-C08; B10-A13D; B12-K04; C04-B04D5; C05-C01 ; C05-C04; C05-C08; C10-A13D; C12-K04; D04-A; J04-C04

12/5/5 (Item 5 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0007392315
WPI Acc no: 1995-375008/199549

XRPX Acc No: N1995-276604

Non-invasive blood analysis system for diabetic patient - uses integrated analysis element sensor system with transmission link between sensor unit attached to patient and central evaluation unit

Patent Assignee: BOEHRINGER MANNHEIM GMBH (BOEF); ROCHE DIAGNOSTICS GMBH (HOFF)

Inventor: BLASBERG P; BOCKER D; BOECKER D; HAAR H; HAAR H P; KOTULLA R

Patent Family (22 patents, 25 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
EP 680727	A1	19951108	EP 1995106046	A	19950422	199549	B
DE 4415896	A1	19951109	DE 4415896	A	19940505	199550	E
NO 199501754	A	19951106	NO 19951754	A	19950504	199601	E
AU 199517634	A	19951207	AU 199517634	A	19950426	199605	E
FI 199502131	A	19951106	FI 19952131	A	19950504	199605	E
JP 7311196	A	19951128	JP 1995108801	A	19950502	199605	E
CA 2148569	A	19951106	CA 2148569	A	19950503	199612	E
US 5507288	A	19960416	US 1995434296	A	19950503	199621	E
AU 674474	B	19961219	AU 199517634	A	19950426	199708	E
ZA 199503585	A	19970129	ZA 19953585	A	19950504	199710	E
NZ 272000	A	19970424	NZ 272000	A	19950427	199723	E
US 5507288	B1	19970708	US 1995434296	A	19950503	199733	E
CN 1128353	A	19960807	CN 1995105402	A	19950504	199750	E
HU 75243	T	19970528	HU 19951274	A	19950503	199803	E
IL 113569	A	19980104	IL 113569	A	19950501	199808	E
TW 366278	A	19990811	TW 1995104189	A	19950427	200032	E
KR 163476	B1	19981215	KR 199510996	A	19950504	200036	E
CA 2148569	C	20020716	CA 2148569	A	19950503	200256	E
EP 680727	B1	20030618	EP 1995106046	A	19950422	200341	E
DE 59510722	G	20030724	DE 59510722	A	19950422	200353	E
			EP 1995106046	A	19950422		
ES 2201083	T3	20040316	EP 1995106046	A	19950422	200424	E
JP 3568624	B2	20040922	JP 1995108801	A	19950502	200462	E

Priority Applications (no., kind, date): DE 4415896 A 19940505; EP 1995106046 A 19950422

Alerting Abstract EP A1

The blood analysis system is used to monitor the glucose conc. of the blood using a sensor unit (2) attached to the body of the patient, with a sensor (7) measuring a parameter which is dependent on the glucose conc. and a transmitter for transmitting the obtained data to a central evaluation unit (3). Pref.

the sensor unit uses light for detecting a physical parameter dependent on the glucose conc., the evaluation unit calibrating the **received data** with **analysis data** for the **analysis** element, held in a memory, to control a read-out display (21).
ADVANTAGE - Continuous monitoring of glucose conc. with high degree of accuracy and relative simplicity.

Title Terms /Index Terms/Additional Words: NON; INVADE; BLOOD; ANALYSE; SYSTEM; DIABETES; PATIENT; INTEGRATE; ELEMENT; SENSE; TRANSMISSION; LINK; UNIT; ATTACH; CENTRAL; EVALUATE

ECLA: A61B-005/00B, A61B-005/00R, A61B-005/145G
US Classification, Issued: 128633, 128636, 128637, 128903

File Segment: EngPI; EPI;
DWPI Class: S03; S05; W05; P31; P34
Manual Codes (EPI/S-X): S03-E14H1; S05-C01; S05-D01G; W05-D04

B. Patent Files, Full-Text

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File 348:EUROPEAN PATENTS 1978-201139
         (c) 2011 European Patent Office
File 349:PCT FULLTEXT 1979-2011/UB=20110929|UT=20110922
         (c) 2011 WIPO/Thomson

Set      Items   Description
S1      464153   (DETECT??? OR SENSE? ? OR SENSING OR DETERMIN? OR ANALY?E? ? OR
 SPECTROGRAPH? OR MASS()SPECTROMETRY OR RECOGNIZ? OR IDENTIF? OR PERCEIV? OR
SENSOR? ? OR MEASUR? OR ASSESS?) (5N) (SUBSTANCE? ? OR CHEMICAL? ? OR PRODUCT? ? OR
SOLID? ? OR LIQUID? ? OR GAS? ? OR HAZARDOUS OR BIOLOGICAL OR RADIOACTIVE OR
MEDICINE? ? OR NARCOTIC? ?)

S2       98185   (REMOTE?? OR (ANOTHER OR DIFFERENT)(2N)(LOCATION? ? OR PLACE? ? OR
ROOM? ? OR BUILDING? ?) OR DISTAN?? OR FAR()AWAY OR OFFSITE OR SEPARAT??? OR APART
OR CELLULAR OR CELL()PHONE? ? OR SATELLITE? ? OR PORTABLE OR MOBILE? ? OR WAN OR
TRANSPORTABLE OR WIDE()AREA()NETWORK OR RADIO()FREQUENCY OR WIDEBAND OR
TRANSMITTER? ? OR BLUETOOTH OR WIFI OR RF OR UNTETHERED OR WIRELESS OR RFID) (7N)
(SENSOR? ? OR SENSER? ? OR (SCANNING OR READING OR SENSING)(2N)(DEVICE? ? OR APPTS
OR APPARATUS OR MACHINE? ? OR UNIT? ?))

S3        8463   (AIR()DROP??? OR AIRDROP??? OR PARACHUT? OR PLUMMET? ? OR DESCEND?
? OR PLUNG??? OR DROP??? OR FREEFALL??? OR FREE()FALL???) (7N) (SENSOR? ? OR
SENSER? ? OR (SCANNING OR READING OR SENSING)(2N)(DEVICE? ? OR APPTS OR APPARATUS
OR MACHINE? ? OR UNIT? ?))

S4     1395589   (TRANSMIT? ? OR TRANSMISSION? ? OR GENERAT? OR REPORTING OR
EXCHANG??? OR RECEIV??? OR RECEIPT? ? OR DEPOSIT? ? OR SEND??? OR TRANSFER? OR SENT
OR DISPATCH???) (7N) (DATA OR INFORMATION OR REPORT? ? OR INFO OR SUMMARY OR
SUMMARIES OR FILE? ? OR ANALYSIS OR FINDING? ? OR RESULT? ?)
```

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S5       21038   (NOTIFY OR NOTIFIES OR ALERT??? OR COMMUNICAT? TRANSMIT? ? OR
 TRANSMISSION? ? OR EXCHANG??? OR SEND??? OR TRANSFER? OR SENT OR DISPATCH??? OR
CONVEY? ? OR FORWARD? ? OR INFORM??? OR APPRIS???) (5N) (AUTHORITY OR AUTHORITIES
OR EXPERT? ? OR ANALYST? ? OR SPECIALIST? ? OR CONSULTANT? ? OR PROFESSIONAL? ? OR
EVALUATOR? ? OR RATER? ? OR SCORER? ? OR GURU? ? OR MASTER? ? OR ADVI?R? ?)

S6       45456   (HIERARCH? OR STRUCTURE? ? OR ORGANIZATION? ? OR GROUP? ? OR
WORKGROUP? ? OR WORK()GROUP? ? OR LISTING OR PRIORIT? OR LIST OR IMPORTANCE OR
ORDER OR TIER? ? OR CHAIN()COMMAND OR LEVEL? ?) (7N) (AUTHORITY OR AUTHORITIES OR
EXPERT? ? OR ANALYST? ? OR SPECIALIST? ? OR CONSULTANT? ? OR PROFESSIONAL? ? OR
EVALUATOR? ? OR RATER? ? OR SCORER? ? OR GURU? ? OR MASTER? ? OR ADVI?R? ?)

S7        4111   AU=(SMITH, M? OR SMITH M? OR SMITH(2N)(M OR MAURICE) OR LUSBY, M?
OR LUSBY M? OR LUSBY(2N)(M OR MICHAEL) OR VAN HOOK, A? OR VAN HOOK A? OR VAN
HOOK(2N)(A OR ARTHUR) OR COOK, C? OR COOK C? OR COOK(2N)(C OR CHARLES?) OR WENSKI,
E? OR WENSKI E? OR WENSKI(2N)(E OR EDWARD) OR SOLYOM, D? OR SOLYOM D? OR
SOLYOM(2N)(D OR DAVID))

S8      310705   IC=(G06F OR G06Q)
S9        7362   S1(S)S2
S10         65   S9(S)S3
S11         20   S10(S)S4
S12          5   S11 NOT AY>2002
S13         32   S10 NOT AY>2002
S14          2   S13 AND S8
S15        566   S7 AND S1
S16         41   S15 AND S2
S17          5   S16 AND S3
```

DIALOG(R)File 348: EUROPEAN PATENTS

12/3K/1 (Item 1 from file: 348)
02304179

Noninvasive measurements of chemical substances
Nichtinvasive Messungen von chemischen Substanzen
Mesures non-invasives de substances chimiques

Patent Assignee:

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  (Applicant designated States: all)

Inventor:

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Legal Representative:

- **Instone, Terry et al (9222671)**
  Lloyd Wise, McNeight & Lawrence; Commenwealth House1-19 New Oxford StreetLondon WC1A 1LW; (GB)

	Country	Number	Kind	Date	
Patent	EP	1818008	A1	20070815	(Basic)
Application	EP	2007008827		20010820	
Priorities	US	790653		20010223	

Related Parent Numbers: Patent (Application):EP 1370144 (EP 2001963730)

NOTE: Figure number on first page: 100A

Specification: ...conjunctival surface further allowing precise positioning.

The present invention also discloses minimally invasive techniques for placement of systems under the conjunctiva that uses only one **drop** of anesthetic for the procedure. The conjunctiva is the only superficial place in the body that allows painless surgical implantation of hardware to be done...illustrate interpretation of signals generated from the contact device of the present invention and the analysis of the signals to provide different test measurements and **transmission** of this **data** to remote locations, such as an intensive care unit setting.

Figure 38A schematically illustrates a contact device of the present invention with Figure 38B being... ...in accordance with the embodiment of FIG. 90.

FIG. 93A schematically illustrates an alternative embodiment for implantation.

FIG. 93B is an enlarged view of the **sensor** arrangement shown in FIG. 93A.

FIG. 94 schematically illustrates another alternative embodiment ofthe present invention.

FIG. 95A schematically illustrates another embodiment of the present invention...

DIALOG(R)File 348: EUROPEAN PATENTS

12/3K/2 (Item 2 from file: 348)
00407105

Delta P/delta t pressure sensor system.
Delta P/delta t Druckmessfuhlersystem.
Delta P/delta t systeme de capteur de pression.

Patent Assignee:

- **Ballyns, Jan** (1176880)
  1125 Meadowlane Crescent; Pickering Ontario L1X 1E5 (CA)
  (applicant designated states: AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)

Inventor:

- **Ballyns, Jan**
  1125 Meadowlane Crescent; Pickering Ontario L1X 1E5; (CA)

Legal Representative:

- **de Bruijn, Leendert C. et al (19641)**
  Nederlandsch Octrooibureau Scheveningseweg 82 P.O. Box 29720; NL-2502 LS Den Haag; (NL)

	Country	Number	Kind	Date	
Patent	EP	431217	A2	19910612	(Basic)
Patent	EP	431217	A3	19911227	
Patent	EP	431217	B1	19940309	
Application	EP	89203252		19891218	
Priorities	US	447807		19891208	

Designated States:
AT; BE; CH; DE; ES; FR; GB; GR; IT; LI;
LU; NL; SE

International Patent Class (V7): G01L-017/00; B60C-023/04; H01H-035/34; **Abstract Word Count:** 117

Specification: ...the fluid medium in which the sensor is operating from the fluid medium in the pressure sensor system. It will be apparent that if the **sensor** system 260 of Figure 13 is located in a pressure sensitive system in which the pressure drops the bellows 252 and 254 will both expand... ...be deflected into contact with the support valve 280 which will, in turn, activate the electrical system to generate an alarm. Similarly, if the pressure **in** the system **in** which the **sensor** 260 is located increases at a hazardous rate, the pressure in the chamber A will increase at a greater rate than the pressure in the... the form of a normally open bimetallic switch which is temperature sensitive and will close to complete the circuit and generate an alarm when the **temperature** in the fluid medium in which **it** is located rises above a predetermined limit. As previously indicated, the sensor 10 compensates for temperature changes in the system and while this has distinct... ...dual tires, one of the two tires of a set may be overloaded and may heat up until it explodes. The system illustrated in Figure **14** will **generate** an alarm even if the pressure sensor is not activated by the change in pressure in the system.

As previously indicated, the pressure sensor of...

12/3K/4 (Item 1 from file: 349)
DIALOG(R)File 349: PCT FULLTEXT

00985206

IMAGE SENSING APPARATUS INCLUDING A MICROCONTROLLER
APPAREIL DE DETECTION D'IMAGE COMPRENANT UN MICROCONTROLEUR

Patent Applicant/Patent Assignee:

- **SILVERBROOK RESEARCH PTY LTD**
  393 Darling Street, Balmain, New South Wales 2041; AU; AU(Residence); AU(Nationality); (For all designated states except: US)

Patent Applicant/Inventor:

- **SILVERBROOK Kia**
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Legal Representative:

- **SILVERBROOK Kia (agent)**
  Silverbrook Research Pty Ltd, 393 Darling Street, Balmain, New South Wales 2041; AU

	Country	Number	Kind	Date
Patent	WO	200315395	A1	20030220
Application	WO	2002AU919		20020709
Priorities	US	2001922274		20010806

Designated States: (Protection type is "Patent" unless otherwise stated - for applications prior to 2004)
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW

[EP] AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; SK; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG;

[AP] GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZM; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

Detailed Description:

...for an image sensing and processing apparatus, the microcontroller comprising a wafer substrate; V`LIW processor circuitry that is positioned on the wafer substrate; image **sensor** interface circuitry that is positioned on the wafer substrate and is connected between the VLIW processor circuitry and the image sensor, the image sensor interface...version of the ACP requires two area image sensor interfaces with a second optional image sensor 4 being provided for stereoscopic effects.

2. Area image **sensor** compensation, reformatting, and image enhancement.

3. Memory interface and management to a memory store 33.

4. Interface, control, and analog to digital conversion of an...MAX-CLOCKMARK-DEVIATION
else
if (diff < -NLAX-CLOCKMARK-DEVIAIION)
diff = -MAX-CLOCKMARK- DEVIATION
UpperClock.column += diff
H Use the newly obtained clockmark center to
H **determine** a more accurate border position.

diff = GetAccuratePixel(UpperClock.column, UpperClock.pixel)
diff -= UpperClock.pixel
if (diff > MAX-CLOCKMARK-DEVIATION)
diff = MAX-CLOCKMARK-DEVIATION
else
if...The scheme used to determine a dot's value if the pixel value is between BlackMax and WhiteMin is not too complex, but gives good **results**. It uses the pixel values of the dot centers to the left and right of the dot in question, using their values to help determine...

12/3K/5 (Item 2 from file: 349)
DIALOG(R)File 349: PCT FULLTEXT

00969338

MAGNETIC-BASED PLACEMENT AND RETENTION OF SENSOR ELEMENTS IN A SENSOR ARRAY
MISE EN PLACE ET FIXATION PAR PROCEDE MAGNETIQUE POUR DES ELEMENTS DE SONDE EN MATRICE

Patent Applicant/Patent Assignee:

- **BOARD OF REGENTS THE UNIVERSITY OF TEXAS SYSTEM**
  201 West 7th Street, Austin, TX 78701; US; US(Residence); US(Nationality)

Inventor(s):

- **MCDEVITT John T**
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- **ANSLYN Eric V**
  8323 Young Lane, Austin, TX 78737; US
- **SHEAR Jason B**
  4433 Sacred Arrow Drive, Austin, TX 78735; US
- **NEIKIRK Dean P**
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Legal Representative:

- **MEYERTONS Eric B (agent)**
  Meyertons, Hood, Kivlin, Kowert & Goetzel, P.C., P.O. Box 398, Austin, TX 78767-0398; US

	Country	Number	Kind	Date
Patent	WO	2002103371	A2-A3	20021227
Application	WO	2002US3277		20020131
Priorities	US	2001775342		20010131

Designated States: (Protection type is "Patent" unless otherwise stated - for applications prior to 2004) AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW

[EP] AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG;

[AP] GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZM; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

Detailed Description:

...to transfer a portion of its fluorescent energy 325 to the second fluorescent indicator 330. This transfer in energy may be measured by either a **drop** in energy of the fluorescence of the first indicator molecule 320, or the detection of increased fluorescence 314 by the second indicator molecule 330.

Alternatively...variety of different detection system enclosures. Each of the detection system enclosures

may include different sensor arrays mounted within their chambers. Instead of having to **exchange** the sensor array for different types of **analysis**, the entire detection system enclosure may be **exchanged**. This may prove advantageous, when a variety of detection schemes are used. For example a first detection system enclosure may be configured for white light...light at a characteristic wavelength and then re-emit the light at a characteristically different wavelength. The emitted light, however, may be reduced by electron **transfer** with the fluorescent quncher, which **results** in quenching of the fluorescence. Therefore, if the presence of an analyte perturbs the quenching properties of the fluorescence quencher, a modulation of the fluorescent...of the surrounding solution (see FIG. 63).

Transmiffing Chemical Information Over A Computer Network
Herein we describe a system and method for the collection and **transmission** of chemical **information** over a computer network. The system, in some embodiments, includes an analyte detection device ("ADD") operable to detect one or more analytes or mixtures of analytes in a fluid containing one or more analytes, and computer hardware and software operable to **send** and **receive data** over a computer network to and from a client computer system.

Chemical information refers to any data representing the detection of a specific chemical or ...data to chemical information that is representative of the analytes in the analyzed fluid system. The chemical information may be either the raw data before **analysis** by the computer software or the **information generated** by processing of the raw **data**.

The term "computer systenf' as used herein generally describes the hardware and software components that ...a company's intranet that is extended to users outside the company. An extranet may require security and privacy. Companies may use an extranet to **exchange** large volumes of **data**, share product catalogs exclusively with customers, collaborate with other companies on joint development efforts, provide or access services provided by one company to a group...network appliance, Internet appliance, personal digital assistant (PDA) or other system. Client computer system 106 may execute software to comniunicate with ADD 102, thus facilitating **transmission** of chemical **data** from the ADD 102 to client computer system 106 and vice versa.

In one embodiment, the ADD may execute software operable to **transmit** chemical **data** via any of various communication protocols over the network to one or more recipient client computer systems and to receive responses from the recipient client...systems 106 may each optionally transmit a response back to ADD 102. The response may include, but is not limited to, a request for additional **information**, a confirmation of **received data**, or a transmittal of chemical **information** back to the ADD.

Some embodiments of the ADD ... client computer system 106. The local computer system 108 may have software executable to transmit chemical infortnation to the client computer system 106 and to **receive** response **information** back from the client computer system 106, and client computer system 106 may have software executable to **receive** chemical **information** and to **transmit** a response back to local computer system 108 or to one or more receiving computer systems 107.

As FIG. 67 illustrates, in step 210 an as described above. Local computer system 108 is connected to the network 104 and may use a software program executable to **transmit** the chemical **information** over network 104.

74
As shown in step 214, the chemical information may be transmitted over network 104 to one or more client computer systems...may connect to a server 302, either directly, as with a communication link, or remotely, via computer network 104. The server 302 is operable to **receive** and store the chemical **information**, and to make the chemical information available to client computer systems 106 also connected to network 104. The server 302 may be any of a...software. As another example, the server may be an FTP server, in which case the user of client computer system 106 may be able to **transfer** the chemical **information** from server 302 to client computer system 106 using an FTP software program. As yet another example, server 302 may allow remote login to an then view, edit, or **transfer** the chemical **information** as needed. Client computer system 106 may then optionally transmit a response back to server 302, which may then be accessed by the ADD.

Client'computer system 106 may also **transmit** the response **information** to one or more additional client computer systems 107. In all of these embodiments, security measures may be employed to protect the identity of the...any of a variety of network communication protocols, such as TCP/IP, FTP, HTTP, HTTPS, etc.

In step 318 client computer system 106 may optionally **transmit** response **information** back to server 302, which then may be accessed by ADD 102 to retrieve the response information, or to one or more additional client computer...In another embodiment, the client computer may be coupled to the ADD via a server, as described before.

The client computer may be configured to **receive** and/or **transmit information** to the ADD. In one embodiment, the ADD may be configured to receive control signals from the client computer via the server. The operation of the ADD may, therefore, be controlled via a client computer through a server. As discussed before the ADD may also **transmit** chemical **information** back to the client computer via the server.

In one embodiment, the ADD may be used to detect and identify one or more analytes -in computer system residing at a diagnosis center (e.g. a veterinary hospital or medical office). There a medical expert may **receive** the chemical **information** and interpret it to diagnose the probable cause and/or source of the detected analytes. The medical expert may use this information to make a...102 may upload the test results to a client computer system 106 used by a health care professional. The upload - may be accomplished either by **transferring** the **information** to a local computer system, then transmitting over network 104 to client computer system 106 of the health professional, or directly from ADD 102 to...conditions, including the presence of natural chemicals, industrial wastes, and biological/chemical warfare agents is possible using an embodiment of the invention. Uploading of test **results** via radio **transmission** may provide remote sensing capabilities, and may provide response capabilities through human or central computer directed action. - Response instructions may then be downloaded either to...results of one or more of the tests. hi some embodiments, the tests may be selected by the third party. After the third party has **received** the **results** of the test the appropriate response (e.g. treatment in the case of medical diagnostics) may be selected.

Office visits may also be scheduled using the sensor array system. **Data** collected from a patients sample may be **sent** from the sensor array system to a central data service. The electronic test data may be analyzed at the central data service. The results of...

IV. Text Search Results from Dialog

A. NPL Files, Abstract

```
File  35:Dissertation Abs Online 1861-2011/Aug
        (c) 2011 ProQuest Info&Learning
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
        (c) 2002 Gale/Cengage
File  65:Inside Conferences 1993-2011/Oct 04
        (c) 2011 BLDSC all rts. reserv.
File   2:INSPEC 1898-2011/Sep W4
        (c) 2011 The IET
File 474:New York Times Abs 1969-2011/Oct 04
        (c) 2011 The New York Times
File 475:Wall Street Journal Abs 1973-2011/Feb 14
        (c) 2011 The New York Times
File  99:Wilson Appl. Sci & Tech Abs 1983-2011/Sep
        (c) 2011 The HW Wilson Co.

Set     Items   Description
S1     479650   (DETECT??? OR SENSE? ? OR SENSING OR DETERMIN? OR ANALY?E? ? OR
 SPECTROGRAPH? OR MASS()SPECTROMETRY OR RECOGNIZ? OR IDENTIF? OR PERCEIV? OR
SENSOR? ? OR MEASUR? OR ASSESS?) (5N) (SUBSTANCE? ? OR CHEMICAL? ? OR PRODUCT? ? OR
SOLID? ? OR LIQUID? ? OR GAS? ? OR HAZARDOUS OR BIOLOGICAL OR RADIOACTIVE OR
MEDICINE? ? OR NARCOTIC? ?)

S2      93663   (REMOTE?? OR (ANOTHER OR DIFFERENT)(2N)(LOCATION? ? OR PLACE? ? OR
ROOM? ? OR BUILDING? ?) OR DISTAN?? OR FAR()AWAY OR OFFSITE OR SEPARAT??? OR APART
OR CELLULAR OR CELL()PHONE? ? OR SATELLITE? ? OR PORTABLE OR MOBILE? ? OR WAN OR
TRANSPORTABLE OR WIDE()AREA()NETWORK OR RADIO()FREQUENCY OR WIDEBAND OR
TRANSMITTER? ? OR BLUETOOTH OR WIFI OR RF OR UNTETHERED OR WIRELESS OR RFID) (7N)
(SENSOR? ? OR SENSER? ? OR (SCANNING OR READING OR SENSING)(2N)(DEVICE? ? OR APPTS
OR APPARATUS OR MACHINE? ? OR UNIT? ?))

S3       1237   (AIR()DROP??? OR AIRDROP??? OR PARACHUT? OR PLUMMET? ? OR DESCEND?
? OR PLUNG??? OR DROP??? OR FREEFALL??? OR FREE()FALL???) (7N) (SENSOR? ? OR
SENSER? ? OR (SCANNING OR READING OR SENSING)(2N)(DEVICE? ? OR APPTS OR APPARATUS
OR MACHINE? ? OR UNIT? ?))

S4    1069143   (TRANSMIT? ? OR TRANSMISSION? ? OR GENERAT? OR REPORTING OR
EXCHANG??? OR RECEIV??? OR RECEIPT? ? OR DEPOSIT? ? OR SEND??? OR TRANSFER? OR SENT
OR DISPATCH???) (7N) (DATA OR INFORMATION OR REPORT? ? OR INFO OR SUMMARY OR
SUMMARIES OR FILE? ? OR ANALYSIS OR FINDING? ? OR RESULT? ?)

S5      12942   (NOTIFY OR NOTIFIES OR ALERT??? OR COMMUNICAT? TRANSMIT? ? OR
 TRANSMISSION? ? OR EXCHANG??? OR SEND??? OR TRANSFER? OR SENT OR DISPATCH??? OR
CONVEY? ? OR FORWARD? ? OR INFORM??? OR APPRIS???) (5N) (AUTHORITY OR AUTHORITIES
OR EXPERT? ? OR ANALYST? ? OR SPECIALIST? ? OR CONSULTANT? ? OR PROFESSIONAL? ? OR
EVALUATOR? ? OR RATER? ? OR SCORER? ? OR GURU? ? OR MASTER? ? OR ADVI?R? ?)

S6      72355   (HIERARCH? OR STRUCTURE? ? OR ORGANIZATION? ? OR GROUP? ? OR
WORKGROUP? ? OR WORK()GROUP? ? OR LISTING OR PRIORIT? OR LIST OR IMPORTANCE OR
ORDER OR TIER? ? OR CHAIN()COMMAND OR LEVEL? ?) (7N) (AUTHORITY OR AUTHORITIES OR
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EXPERT? ? OR ANALYST? ? OR SPECIALIST? ? OR CONSULTANT? ? OR PROFESSIONAL? ? OR
EVALUATOR? ? OR RATER? ? OR SCORER? ? OR GURU? ? OR MASTER? ? OR ADVI?R? ?)

S7      18183   AU=(SMITH, M? OR SMITH M? OR SMITH(2N)(M OR MAURICE) OR LUSBY, M?
OR LUSBY M? OR LUSBY(2N)(M OR MICHAEL) OR VAN HOOK, A? OR VAN HOOK A? OR VAN
HOOK(2N)(A OR ARTHUR) OR COOK, C? OR COOK C? OR COOK(2N)(C OR CHARLES?) OR WENSKI,
E? OR WENSKI E? OR WENSKI(2N)(E OR EDWARD) OR SOLYOM, D? OR SOLYOM D? OR
SOLYOM(2N)(D OR DAVID))

S8        6439   S1 AND S2
S9          19   S8 AND S3
S10          5   S9 NOT PY>2002
S11        702   S8 AND S4
S12          4   S11 AND S5
S13          1   S12 NOT PY>2002
S14          6   S8 AND S5
S15          2   S14 NOT PY>2002
S16          7   S10 OR S13 OR S15
S17        319   S7 AND S1
S18          1   S17 AND S2
```

16/5/2 (Item 1 from file: 2)
DIALOG(R)File 2: INSPEC

09260893
Title: Adaptive calibration of a capacitance tomography system for imaging water droplet distribution
Author(s): Yang, W.Q.[1]; Chondronasios, A.[1]; Nattrass, S.; Nguyen, V.T.; Betting, M.; Ismail, I.; McCann, H.
Affiliation(s):
[1] Dept. of Electr. Eng. & Electron., UMIST, Manchester, UK
Journal: Flow Measurement and Instrumentation , vol.15 , no.5-6 , pp.249-58
Publisher: Elsevier
Country of Publication: UK
ISSN: 0955-5986
ISSN Type: print
SICI: 0955-5986()15:5/6L.249:ACCT;1-O
CODEN: FMEIEJ
U.S. Copyright Clearance Center Code: 0955-5986/2004/$30.00
Item Identifier (DOI): 10.1016/j.flowmeasinst.200 4.07.001
Language: English
Document Type: Journal Paper (JP)
Treatment: Practical (P); Experimental (X)
Abstract: A highly sensitive electrical capacitance tomography (ECT) system based on an HP4284 impedance analyser has been developed and used to quantify low concentration multi-phase flows in wet gas separation processes. The system hardware provides high accuracy (0.05%) and high resolution (10^{-17} F). The sensor was calibrated in an environmental chamber with solid samples of known permittivity over ranges of temperature and humidity. Adaptive calibration and adjacent electrode pair correction techniques were applied to image very low concentration profiles. This paper describes the techniques

used and presents the experimental results obtained from a test flow rig called Twister, which has been designed to separate liquid droplets from wet gas streams. The test results over a range of operating conditions (20-95% humidity) demonstrate that the ECT system is capable of reconstructing clear images of the droplet distribution inside Twister. Changes as small as 1 gWater/kgAir in the form of liquid droplets were detectable, it has also been shown that the concentration of the condensable phase can be estimated quantitatively within 20% in comparison with the reference measurements. (*14 refs.*)
Subfile(s): A (Physics); B (Electrical & Electronic Engineering)
Descriptors: calibration; capacitance measurement; capacitive **sensors**; **drops**; electric impedance imaging; flow visualisation; tomography; two-phase flow
Identifiers: adaptive calibration; water droplet distribution imaging; highly sensitive electrical capacitance tomography system; HP4284 impedance analyser; low concentration multi-phase flows; wet **gas separation** process; **sensor** calibration; adjacent electrode pair correction techniques; low concentration profile; Twister test flow rig; liquid droplets; wet **gas** streams; image reconstruction; capacitance **measurement**
Classification Codes: A4780A (Flow visualization and imaging); A4755K (Multiphase flows); A0670D (Sensing and detecting devices); A0750 (Electrical instruments and techniques); B7230 (Sensing devices and transducers); B7130 (Measurement standards and calibration); B7310J (Impedance and admittance measurement)
International Patent Classification:
G01D-0018/00 (Testing or calibrating of apparatus or arrangements provided for in groups G01D1/00 to G01D15/00)
G01R-0027/00 (Arrangements for measuring resistance, reactance, impedance, or electric characteristics derived therefrom)
G01R-0027/26 (Measuring inductance or capacitance; Measuring quality factor, e.g. by using the resonance method; Measuring loss factor; Measuring dielectric constants)
G12B-0013/00 (Calibrating of instruments or apparatus)
INSPEC Update Issue: 2005-004

16/5/7 (Item 6 from file: 2)
DIALOG(R)File 2: INSPEC

04651391
Title: Measurement sensitivity of liquid droplet parameters using optical fibers
Author(s): Das, A.K.[1]; Mandal, A.K.[1]
Affiliation(s):
[1] Jadavpur Univ., Calcutta, India
Journal: Proceedings of the SPIE - The International Society for Optical Engineering , vol.1169 , pp.586-96
Country of Publication: USA
Publication Date: 1990
Conference Title: Fiber Optic and Laser Sensors VII
Conference Date: 5-7 Sept. 1989
Conference Location: Boston, MA, USA

Conference Sponsor: SPIE
ISSN: 0277-786X
ISSN Type: print
CODEN: PSISDG
Language: English
Document Type: Conference Paper in Journal (PA)
Treatment: Theoretical or Mathematical (T); Experimental (X)
Abstract: A clad probing technique is used to measure the size number, refractive index and viscosity of liquid; droplets sprayed from a pressure nozzle on an uncoated core-clad fiber. The probe monitors the clad mode power loss within the leaky ray zone represented as a three region fiber. **Liquid** droplets **measured** are Glycerine, commercial grade Turpentine, Linseed oil and some oil mixtures. The measurement sensitivity depends on probing conditions and clad diameter which is observed experimentally and verified analytically. A maximum sensitivity is obtained for the tapered probe-fiber diameter made equal to the clad thickness. A slowly tapered probe-fiber and a small end angle as well as **separation** of the **sensor**-fiber and the probe-fiber further improve the sensitivity. Sensitivities for different systems are shown. The sensitivity is optimized by choosing proper fiber for known liquids. (*14 refs.*)
Subfile(s): A (Physics); B (Electrical & Electronic Engineering)
Descriptors: **drops**; fibre optic **sensors**; nozzles; particle counting; particle size measurement; refractive index measurement; viscosity measurement
Identifiers: droplets counting; fiber optic **sensor**; organic compounds; **liquid droplet** parameters; clad probing; size; refractive index; viscosity; pressure nozzle; uncoated core-clad fiber; clad mode power loss; Glycerine; Turpentine; Linseed oil; oil mixtures; sensitivity; tapered probe-fiber diameter
Classification Codes: A4780 (Measurement instrumentation and techniques for fluid dynamics); A4755E (Nozzles); A4281P (Fibre optic sensors; fibre gyros); A0760H (Optical refractometry and reflectometry); A0630C (Spatial variables measurement); B7230E (Fibre optic sensors); B4125 (Fibre optics); B7320W (Level, flow and volume measurement); B7320P (Optical variables measurement) ; B7320Z (Other nonelectric variables measurement); B7320C (Spatial variables measurement)
International Patent Classification:
G01B (Measuring length, thickness or similar linear dimensions; Measuring angles; Measuring areas; Measuring irregularities of surfaces or contours)
G01F (Measuring volume, volume flow, mass flow, or liquid level; Metering by volume)
G01J (Measurement of intensity, velocity, spectral content, polarisation, phase or pulse characteristics of infra-red, visible or ultra-violet light; Colorimetry; Radiation pyrometry)
INSPEC Update Issue: 1990-014

B. NPL Files, Full-text

```
File  15:ABI/Inform(R) 1971-2011/Oct 03
        (c) 2011 ProQuest Info&Learning
File   9:Business & Industry(R) Jul/1994-2011/Oct 03
        (c) 2011 Gale/Cengage
```

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File 610:Business Wire 1999-2011/Oct 04
         (c) 2011 Business Wire.
File 810:Business Wire 1986-1999/Feb 28
         (c) 1999 Business Wire
File 275:Gale Group Computer DB(TM) 1983-2011/Aug 11
         (c) 2011 Gale/Cengage
File 624:McGraw-Hill Publications 1985-2011/Oct 03
         (c) 2011 McGraw-Hill Co. Inc
File 621:Gale Group New Prod.Annou.(R) 1985-2011/Aug 02
         (c) 2011 Gale/Cengage
File 636:Gale Group Newsletter DB(TM) 1987-2011/Sep 30
         (c) 2011 Gale/Cengage
File 613:PR Newswire 1999-2011/Oct 04
         (c) 2011 PR Newswire Association Inc
File 813:PR Newswire 1987-1999/Apr 30
         (c) 1999 PR Newswire Association Inc
File  16:Gale Group PROMT(R) 1990-2011/Sep 28
         (c) 2011 Gale/Cengage
File 160:Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 634:San Jose Mercury  Jun 1985-2011/Oct 02
         (c) 2011 San Jose Mercury News
File 148:Gale Group Trade & Industry DB 1976-2011/Sep 30
         (c) 2011 Gale/Cengage
File  20:Dialog Global Reporter 1997-2011/Oct 04
         (c) 2011 Dialog

Set     Items   Description
S1    1767855   (DETECT??? OR SENSE? ? OR SENSING OR DETERMIN? OR ANALY?E? ? OR
 SPECTROGRAPH? OR MASS()SPECTROMETRY OR RECOGNIZ? OR IDENTIF? OR PERCEIV? OR
SENSOR? ? OR MEASUR? OR ASSESS?) (5N) (SUBSTANCE? ? OR CHEMICAL? ? OR PRODUCT? ? OR
SOLID? ? OR LIQUID? ? OR GAS? ? OR HAZARDOUS OR BIOLOGICAL OR RADIOACTIVE OR
MEDICINE? ? OR NARCOTIC? ?)

S2     131320   (REMOTE?? OR (ANOTHER OR DIFFERENT)(2N)(LOCATION? ? OR PLACE? ? OR
ROOM? ? OR BUILDING? ?) OR DISTAN?? OR FAR()AWAY OR OFFSITE OR SEPARAT??? OR APART
OR CELLULAR OR CELL()PHONE? ? OR SATELLITE? ? OR PORTABLE OR MOBILE? ? OR WAN OR
TRANSPORTABLE OR WIDE()AREA()NETWORK OR RADIO()FREQUENCY OR WIDEBAND OR
TRANSMITTER? ? OR BLUETOOTH OR WIFI OR RF OR UNTETHERED OR WIRELESS OR RFID) (7N)
(SENSOR? ? OR SENSER? ? OR (SCANNING OR READING OR SENSING)(2N)(DEVICE? ? OR APPTS
OR APPARATUS OR MACHINE? ? OR UNIT? ?))

S3       3571   (AIR()DROP??? OR AIRDROP??? OR PARACHUT? OR PLUMMET? ? OR DESCEND?
? OR PLUNG??? OR DROP??? OR FREEFALL??? OR FREE()FALL???) (7N) (SENSOR? ? OR
SENSER? ? OR (SCANNING OR READING OR SENSING)(2N)(DEVICE? ? OR APPTS OR APPARATUS
OR MACHINE? ? OR UNIT? ?))

S4   10102946   (TRANSMIT? ? OR TRANSMISSION? ? OR GENERAT? OR REPORTING OR
EXCHANG??? OR RECEIV??? OR RECEIPT? ? OR DEPOSIT? ? OR SEND??? OR TRANSFER? OR SENT
OR DISPATCH???) (7N) (DATA OR INFORMATION OR REPORT? ? OR INFO OR SUMMARY OR
SUMMARIES OR FILE? ? OR ANALYSIS OR FINDING? ? OR RESULT? ?)

S5     846120   (NOTIFY OR NOTIFIES OR ALERT??? OR COMMUNICAT? TRANSMIT? ? OR
 TRANSMISSION? ? OR EXCHANG??? OR SEND??? OR TRANSFER? OR SENT OR DISPATCH??? OR
CONVEY? ? OR FORWARD? ? OR INFORM??? OR APPRIS???) (5N) (AUTHORITY OR AUTHORITIES
OR EXPERT? ? OR ANALYST? ? OR SPECIALIST? ? OR CONSULTANT? ? OR PROFESSIONAL? ? OR
EVALUATOR? ? OR RATER? ? OR SCORER? ? OR GURU? ? OR MASTER? ? OR ADVI?R? ?)
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S6     6744227   (HIERARCH? OR STRUCTURE? ? OR ORGANIZATION? ? OR GROUP? ? OR
WORKGROUP? ? OR WORK()GROUP? ? OR LISTING OR PRIORIT? OR LIST OR IMPORTANCE OR
ORDER OR TIER? ? OR CHAIN()COMMAND OR LEVEL? ?) (7N) (AUTHORITY OR AUTHORITIES OR
EXPERT? ? OR ANALYST? ? OR SPECIALIST? ? OR CONSULTANT? ? OR PROFESSIONAL? ? OR
EVALUATOR? ? OR RATER? ? OR SCORER? ? OR GURU? ? OR MASTER? ? OR ADVI?R? ?)

S7        6211   AU=(SMITH, M? OR SMITH M? OR SMITH(2N)(M OR MAURICE) OR LUSBY, M?
OR LUSBY M? OR LUSBY(2N)(M OR MICHAEL) OR VAN HOOK, A? OR VAN HOOK A? OR VAN
HOOK(2N)(A OR ARTHUR) OR COOK, C? OR COOK C? OR COOK(2N)(C OR CHARLES?) OR WENSKI,
E? OR WENSKI E? OR WENSKI(2N)(E OR EDWARD) OR SOLYOM, D? OR SOLYOM D? OR
SOLYOM(2N)(D OR DAVID))

S8       14815   S1(S)S2
S9          56   S8(S)S3
S10         11   S9 NOT PY>2002
S11        105   S7 AND S1
S12          2   S11 AND S2
```

10/3,K/1 (Item 1 from file: 15)
DIALOG(R)File 15: ABI/Inform(R)

06745391 119907232
From Just-In-Time to Real Time RFID sensors may be the first step in the creation of a real-time economy, letting companies save millions and respond faster to change. So why isn't everyone using them?

Roberti, Mark
CIO Insight v1n12 pp: 24
Apr 1, 2002
ISSN: 1535-0096 **Journal Code:** CIOI
Word Count: 3235
Text:
...cook turkeys based on instructions from chips in the packaging.

Alien Technology recently won a $120 million contract from the Department of Defense to combine **RFID** tags with other types of **sensors** to pick up vibrations or **detect** the presence of **chemicals** or **biological** agents. The U.S. military wants to **drop** so-called "smart dust" **sensors** on a battlefield, and by picking up vibrations and knowing the exact location of a specific tag, generals could know how many enemies are hiding...

10/3,K/2 (Item 1 from file: 9)
DIALOG(R)File 9: Business & Industry(R)

02864547 Supplier Number: 92588904 **(USE FORMAT 7 OR 9 FOR FULLTEXT)**
Luminescence sensors detect 'invisible' marks.

(Pepperl+Fuchs' RL-UV Series)

Control Engineering Europe , v 3 , n 4 , p 41(1)
September 2002
Document Type: Journal **ISSN:** 0010-8049 (Belgium)
Language: English **Record Type:** Fulltext
Word Count: 303 **(USE FORMAT 7 OR 9 FOR FULLTEXT)**

TEXT:

...welded together. A liquid with luminescent additives is added to one side of the weld seam, and a luminescence sensor scans the other side to **detect** leaked **liquid** droplets. In tests, the P+F RL-UV series consistently detects a 1.5mm diameter **droplet** at about 50mm **distance**. The RL-UV **sensor** features adjustable sensitivity, analogue output, 130mm sensing range, and an IP67 housing.

10/3,K/5 (Item 1 from file: 624)
DIALOG(R)File 624: McGraw-Hill Publications

00894654
OPTIC FUEL SENSOR

EDITED BY PAUL PROCTOR
Aviation Week & Space Technology , Vol. 147, No. 19 , Pg 23
November 11, 1997
Journal Code: AW
Section Heading: INDUSTRY OUTLOOK **ISSN:** 0005-2175
Word Count: 171

Text:

Sandia National Laboratories in Albuquerque, N.M., is looking for an industrial partner to help develop a new fiber-optic **liquid**-level **sensor** technology. The **solid**-state system, patent applied for, should be attractive to aircraft manufacturers and the military as it presents no spark hazard and is not affected by...

...the tank and coupled to the doped fiber's top-end serves as a receiver. It transmits some fraction of the fluorescence generated to a **remote** optical **sensor**. As the **liquid** level **drops**, more of the fiber is exposed, increasing the amount of fluorescence and the signal picked up by the sensor. Pump light ``escapes'' to the fluid...

10/3,K/6 (Item 1 from file: 636)
DIALOG(R)File 636: Gale Group Newsletter DB(TM)

03775626 **Supplier Number:** 48174891 **(USE FORMAT 7 FOR FULLTEXT)**

ROBOT JUMPING 'EGG' COULD BE NEWEST BATTLEFIELD SPY
Military Robotics , v 11 , n 24 , p N/A
Dec 12 , 1997
Language: English **Record Type:** Fulltext
Document Type: Newsletter ; Trade
Word Count: 360

-

...word; that is, the Micro Unat- tended Mobility System. The team is looking at requirements for a tiny robot that would ride piggyback on an **air-dropped** ground-penetrating **sensor** package. The **mobile** device would also carry a **sensor** suite having things like a modular Global Positioning System (GPS) antenna, communications antenna, seismic **sensor**, microphone, electro-magnetic **detector** and **chemical sensor**.

Pavlo Rudakevych, program manager at IS, said that in his Phase I STTR contract he is looking at three different MUMS types. The goal is...

10/3,K/7 (Item 1 from file: 160)
DIALOG(R)File 160: Gale Group PROMT(R)

01717713

Small sensor uses special sound wave to measure viscosity.

SANDIA SCIENCE NEWS May, 1987 p. 31

A new **solid**-state **sensor** that can **measure** the viscosity of a **drop** of liqud has been developed at Sandia National Laboratories. The tiny microelectronic device could be used to measure the viscosity of important fluids in engines...

...the HPSW is in the plane of the surface and perpendicular to the wave's direction of travel. Conventional methods of measuring viscosity use large **sensors**, the majority of which cannot be **remotely** installed. The new device measures only 1" x 1/2" allowing it to be used in places where viscosity measurements are difficult. The device features...

10/3,K/8 (Item 1 from file: 148)
DIALOG(R)File 148: Gale Group Trade & Industry DB

09175302 **Supplier Number:** 18969756 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Sensor technology update: development of sensors continues the historical account of automotive electronic control systems.

Automotive Engineering , v104 , n9 , p123(6)
Sep , 1996
ISSN: 0098-2571
Language: English
Record Type: Fulltext; Abstract
Word Count: 2607 **Line Count:** 00213
...s in development testing. The sensor elements are mounted in ceramic plugs in separate chambers with polytetrafluoroethylene membranes to modulate air flow and protect the **sensor** from thermal shocks of **liquid drops**. The packaging, shown in Figure 17, is designed for mounting in the air intake passage to the climate control system.

10/3,K/11 (Item 4 from file: 148)
DIALOG(R)File 148: Gale Group Trade & Industry DB

03118519 **Supplier Number:** 04670812 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Checking steam trap operation.

Cunningham, Ernest R.
Plant Engineering , v41 , p38(5)
Feb 12 , 1987
ISSN: 0032-082X
Language: ENGLISH
Record Type: FULLTEXT
Word Count: 2868 **Line Count:** 00221
...is given. Operation can be checked remotely. As steam volume in the sensor chamber increases, raising the pressure differential across the weir, the condensate level **drops** to expose the **sensor**, breaking the circuit, and a red signal is given. This device provides a positive method of identifying leaking traps. (Courtesy Spirax/Sarco) Photo: Fig. 7...

V. Additional Resources Searched

Financial Times FullText (via ProQuest): No relevant results.

Internet & Personal Computing Abstracts (via EBSCOhost): No relevant results.

Google: See attached article.